

STIC EIC 2100 Search Request Form

Today's Date:

12/13/07

What date would you like to use to limit the search?

Priority Date:

01/08/09

Other:

Name

Anh Ly

AU 2162

Examiner #

77831

Room #

3A39

Phone

24039

Serial #

09/226939

Format for Search Results (Circle One):

PAPER

DISK

EMAIL

Where have you searched so far?

USP DWPI EPO JPO ACM IBM TDB

IEEE INSPEC SPI

Other

Is this a "Fast & Focused" Search Request? (Circle One) YES NO

A "Fast & Focused" Search is completed in 2-3 hours (maximum). The search must be on a very specific topic and meet certain criteria. The criteria are posted in EIC2100 and on the EIC2100 NPL Web Page at <http://ptoweb/patents/stic/stic-tc2100.htm>.

What is the topic, novelty, motivation, utility, or other specific details defining the desired focus of this search? Please include the concepts, synonyms, keywords, acronyms, definitions, strategies, and anything else that helps to describe the topic. Please attach a copy of the abstract, background, brief summary, pertinent claims and any citations of relevant art you have found.

Is this request for a BOARD of APPEALS case? (Circle One) YES NO

Is this case a SPECIAL CASE?

(Circle One)

YES

NO

Recursively querying a database for one or more dependencies of procedural code objects stored in the database and identifying one or more dependencies of procedural code objects stored in the database

Abstract

"Generating the complete dependency graph of a database code object" (SQL language & PL/SQL)

STIC Searcher

BMims

Phone

2-3528

Date picked up

12/13/07

Date Completed

12/13/07

Set	Items	Description
S1	300364	DATABASE? OR DATABANK? OR DATA() (BASE? OR BANK? OR FILE? OR REPOSITOR? OR WAREHOUSE?) OR DB OR RDB OR OODB OR ODBC OR DB-MS
S2	265	S1(7N) ((RECURS? OR REPEAT? OR PROGRESSIV? OR REITERAT? OR - ITERAT? OR REPRIS? OR (RUN OR DO OR EXECUT?) () AGAIN OR REDO??? OR RE() (DO OR DOING OR RUN? ? OR RUNNING OR EXECUT?)) (5N) (IN-QUIR? OR ENQUER???? OR QUERY??? OR QUERIE? ? OR REQUEST? OR A-SK??? OR QUESTION? OR SEARCH?))
S3	4173	(COMPLET? OR FINISH??? OR END??? OR ENTIR? OR FULLY OR TOT-AL? OR RESULT?) (5N) (SUBROUTIN? OR EMULAT? OR SUBPROGRAM? OR C-OMPUTER? (2N) (CODE? OR UTILIT? OR SCRIPT? OR PROGRAM? OR ROUTI-NE? OR SUBROUTIN? INFORMATION? OR DATA))
S4	766	S3(3N) (CREAT? OR PRODUC? OR DEVELOP? OR ORIGINAT? OR MAKE? OR MAKING? OR MADE OR GENERAT?)
S5	15301	(LOGIC? OR DIRECTION? OR FUNCTION? ? OR RULE?? OR METHOD?? OR PROCEDUR? OR FORMULA? OR STRATEG? OR INSTRUCTION?? OR EXPR-SSION???) (2N) (CODE? OR UTILIT? OR SCRIPT? OR PROGRAM? OR ROU-TINE? OR SUBROUTIN?) (2N) (CLASS?? OR OBJECT? OR ENTIT?)
S6	1294	S5(5N) (MULTI OR PLURAL? OR MORE(2N) ONE OR SEVERAL OR MANY - OR VARIOUS OR VARIET?)
S7	64	S6(7N) (MONITOR? OR EXAMIN? OR DETECT? OR UNCOVER? OR REVEA-L? OR ASSESS? OR EVALUAT? OR INSPECT?)
S8	192	S6(7N) (DETERMIN? OR COMPAR? OR DISCERN? OR ASCERTAIN? OR A-NALY? OR IDENT? OR CHECK? OR VERIF? OR JUDG???)
S9	0	S2 AND S4 AND S7:S8
S10	1	S2 AND S4
S11	2	S2 AND S3
S12	1	S11 NOT S10
S13	0	S2 AND PROCEDUR? (2N) CODE? ? (2N) (CLASS? OR OBJECT? OR ENTIT-?)
S14	0	S2 AND S7:S8
S15	3	S3 AND S7:S8
S16	3	S15 NOT S10:S12
S17	1935	(REPAIR? OR FIX OR FIXE? ? OR FIXING OR PATCH? OR RESTOR? - OR CORRECT? OR DEBUG? OR DE() (BUG? ? OR BUGG???) OR REBUIL?) (-3N) (STORE? ? OR STORAG? OR STORING OR MEMOR?) (3N) (CLASS? OR O-BJECT? OR ENTIT?)
S18	1	S2 AND S17
S19	0	S18 NOT S10:S16
S20	0	S1:S2 AND S17 AND S3:S4 AND S5:S8
S21	0	S17 AND S3:S4 AND S5:S8
S22	59	S17 AND S5:S8
S23	8	S22 AND S1
S24	8	S23 NOT S10:S16
S25	213	S1 AND S17
S26	1	S25 AND S2
S27	0	S25 AND S3:S4 AND S5:S8
S28	8	S25 AND S5:S8
S29	9	S26:S28
S30	0	S29 NOT (S10:S16 OR S18 OR S23:S24)
S31	3	S25 AND (PROCEDUR? OR FUNCTION? OR FORMULA? OR INSTRUCT?) (-2N) (CODE? ? OR SCRIPT? OR PROGRAM? OR ROUTIN?) (2N) (CLASS? OR - OBJECT? OR ENTIT?)
S32	0	S31 NOT S28:S29

File 350:Derwent WPIX 1963-2007/UD=200779

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File 347:JAPIO Dec 1976-2007/Jun(Updated 070926)

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10/69/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0010304689 - Drawing available

WPI ACC NO: 2000-618567/200059

XRFX Acc No: N2000-458404

Automatic subroutine information generation for DBMS, involves applying set of recursive algorithm and source code passing to code object repeatedly until new subroutine is not added to generated subroutine data

Patent Assignee: CHERNY I (CHER-I); COMPUTER ASSOC THINK INC (COMP-N);
{ VINCENT J K (VINC-I)

Inventor: CHEMY I; CHERNY I; VICENT J K; VINCENT J K

Patent Family (11 patents, 87 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WO 2000041100	A1	20000713	WO 2000US276	A	20000106	200059 B
AU 200027204	A	20000724	AU 200027204	A	20000106	200059 E
US 20010049682	A1	20011206	US 1999226939	A	19990108	200203 E
BR 200007412	A	20020409	BR 20007412	A	20000106	200232 E
			WO 2000US276	A	20000106	
KR 2001108075	A	20011207	KR 2001708647	A	20010707	200236 E
EP 1208459	A1	20020529	EP 2000905546	A	20000106	200243 E
			WO 2000US276	A	20000106	
CN 1342292	A	20020327	CN 2000804484	A	20000106	200247 E
ZA 200105551	A	20020731	ZA 20015551	A	20010705	200271 E
JP 2002534742	W	20021015	JP 2000592758	A	20000106	200282 E
			WO 2000US276	A	20000106	
AU 2004222703	A1	20041118	AU 200027204	A	20000106	200505 NCE
			AU 2004222703	A	20041019	
IL 144106	A	20061031	IL 144106	A	20000106	200680 E

Priority Applications (no., kind, date): US 1999226939 A 19990108; AU 2004222703 A 20041019

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 2000041100	A1	EN	39	9	
National Designated States,Original: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW					
Regional Designated States,Original: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW					
AU 200027204	A	EN			Based on OPI patent WO 2000041100
BR 200007412	A	PT			PCT Application WO 2000US276
					Based on OPI patent WO 2000041100
EP 1208459	A1	EN			PCT Application WO 2000US276
					Based on OPI patent WO 2000041100
Regional Designated States,Original: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
ZA 200105551	A	EN	44		
JP 2002534742	W	JA	38		PCT Application WO 2000US276
					Based on OPI patent WO 2000041100
AU 2004222703	A1	EN			Division of application AU 200027204
IL 144106	A	EN			Based on OPI patent WO 2000041100

Alerting Abstract WO A1

NOVELTY - A complete subroutine information is generated by repeatedly applying recursive algorithm and source code passing until a new

subroutine is not added to subroutine information. The generated subroutine information does not contain details of subroutine which involve code objects during execution of data manipulation statement and which implement object oriented code objects in the database.

DESCRIPTION - The subroutine information is maintained in a data structure termed as tracking array which is scanned to compile code objects in debug mode. Identification of calling paths in database code coverage tool, object profiling tool and object testing tool, identification of cyclic subroutines, database code objects and subroutine information presentation tool is done with subroutine information of subprograms in data management system.

An INDEPENDENT CLAIM is also included for A computer program product embedded on a computer readable medium for use in debugging a target data base code object.

USE - For **generating complete subroutine** information for relational database management system (RDBMS).

ADVANTAGE - Complexity in debugging and testing of code object is reduced and hence the time consumption and cost for debugging is reduced. The generated subroutine information does not contain code objects during execution of data manipulation statement.

DESCRIPTION OF DRAWINGS - The figure shows the flowchart of the method of **generating complete subroutine** information in DBMS.

Title Terms/Index Terms/Additional Words: AUTOMATIC; SUBROUTINES; INFORMATION; GENERATE; APPLY; SET; RECURSIVE; ALGORITHM; SOURCE; CODE; PASS; OBJECT; REPEAT; NEW; ADD; DATA

Class Codes

International Classification (Main): G06F-012/00, G06F-017/30

(Additional/Secondary): G06F-011/28, G06F-011/36

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0011/28	A	I	F	R	20060101
G06F-0011/36	A	I	L	R	20060101
G06F-0012/00	A	I	L	R	20060101
G06F-0017/30	A	I	L	R	20060101
G06F-0007/00	A	I		R	20060101
G06F-0009/44	A	I		R	20060101
G06F-0011/36	A	I	L		20060101
G06F-0017/30	A	I	L		20060101
G06F-0017/30	A	I		R	20060101
G06F-0003/06	A	I	F		20060101
G06F S I			R		20060101
G06F-0011/28	C	I	F	R	20060101
G06F-0011/36	C	I	L	R	20060101
G06F-0012/00	C	I	L	R	20060101
G06F-0017/30	C	I	L	R	20060101
G06F-0017/30	C	I		R	20060101
G06F-0007/00	C	I		R	20060101
G06F-0009/44	C	I		R	20060101

US Classification, Issued: 707100000

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J05B3; T01-J05B4B; T01-J05B4M; T01-S03

?

16/69,K/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0005801658 - Drawing available
WPI ACC NO: 1992-024591/199203
Related WPI Acc No: 1991-223082; 1992-024596; 1992-024599; 1992-024602;
1992-024601; 1992-268838; 1992-097074; 1992-097065; 1992-097064;
1992-097062; 1992-097060; 1992-024605; 1992-024604; 1992-024603;
1992-024598; 1992-024593; 1992-024589; 1992-024590; 1992-024587
XRPX Acc No: N1992-018741

Instruction scheduling optimisation on processor - rearranging machine instructions into order that will result in fastest execution based upon resource interaction simulation

Patent Assignee: CRAY RES INC (CRAY-N); SUPERCOMPUTER SYSTEMS LP (SUPE-N)

Inventor: RASBOLD J C; VAN DYKE D A; VANDYKE D A

Patent Family (10 patents, 16 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WO 1991020031	A	19911226	WO 1991US4073	A	19910610	199203 B
EP 535107	A1	19930407	EP 1991911933	A	19910610	199314 E
US 5202975	A	19930413	WO 1991US4073	A	19910610	
			US 1990537466	A	19900611	199317 E
			US 1990571500	A	19900823	
			US 1992896895	A	19920610	
JP 5508040	W	19931111	JP 1991511254	A	19910610	199350 E
			WO 1991US4073	A	19910610	
TW 213998	A	19931001	TW 1991109901	A	19911218	199351 E
US 5307478	A	19940426	US 1990537466	A	19900611	199416 NCE
			US 1992896895	A	19920610	
			US 1992969789	A	19921029	
TW 237529	A	19950101	TW 1991104744	A	19911218	199511 E
EP 535107	B1	19991208	EP 1991911933	A	19910610	200002 E
			WO 1991US4073	A	19910610	
DE 69131830	E	20000113	DE 69131830	A	19910610	200010 E
			EP 1991911933	A	19910610	
			WO 1991US4073	A	19910610	
JP 3288372	B2	20020604	JP 1991511254	A	19910610	200240 E
			WO 1991US4073	A	19910610	

Priority Applications (no., kind, date): ~~US 1992969789~~ ~~A 19921029~~ US
1992896895 A 19920610; US 1990537466 A 19900611; US 1990571500 A
19900823

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
WO 1991020031	A	EN			
National Designated States,Original: JP KR					
Regional Designated States,Original: AT BE CH DE DK ES FR GB GR IT LU NL SE					
EP 535107	A1	EN			PCT Application WO 1991US4073 Based on OPI patent WO 1991020031
Regional Designated States,Original: DE FR GB					
US 5202975	A	EN	13	5	C-I-P of application US 1990537466 Continuation of application US 1990571500
JP 5508040	W	JA			C-I-P of patent US 5179702 PCT Application WO 1991US4073 Based on OPI patent WO 1991020031
TW 213998	A	ZH			
US 5307478	A	EN	13	5	C-I-P of application US 1990537466

Division of application US 1992896895

C-I-P of patent US 5179702

Division of patent US 5202975

TW 237529 A ZH
EP 535107 B1 EN

PCT Application WO 1991US4073
Based on OPI patent WO 1991020031

Regional Designated States, Original: DE FR GB
DE 69131830 E DE

Application EP 1991911933
PCT Application WO 1991US4073
Based on OPI patent EP 535107
Based on OPI patent WO 1991020031
PCT Application WO 1991US4073
Previously issued patent JP 05508040

JP 3288372 B2 JA 14

Based on OPI patent WO 1991020031

Alerting Abstract WO A

The method schedules instructions for a processor having multiple functional resources where the reordering is accomplished in response to a simulation of the run-time environment of the target machine. The simulation of the run-time environment is performed at compile time, after the machine instructions have been generated by a compiler, or after instruction generation by an assembler.

The machine instructions for a basic block of instructions are rearranged into an order that will result in the faster execution based upon the results of the simulation of the interaction of the multiple functional resources in the target machine.

USE/ADVANTAGE - Scheduling of machine instructions to multiple functional resource in processor during software compilation of source code. Maximises instruction flow. Minimises pipeline halts. @(19pp Dwg.No.3/5)@

Equivalent Alerting Abstract US A

The method for scheduling instructions for a processor having multiple functional resources includes reordering the instructions in response to a simulation of the run-time environment of the target machine. The simulation of the run-time environment of the target machine is performed at compile time after the machine instructions have been generated by a compiler, or after instruction generation by an assembler.

The method involves rearranging the machine instructions for a basic block of instructions into an order that will result in the fastest execution based upon the results of the simulation of the interaction of the multiple functional resources in the target machine.

USE/ADVANTAGE - Rearranging order in which machine instructions within basic block of instructions are issued to processor contg. multiple functional resources, reduces overall execution time of basic block of instructions.

Equivalent Alerting Abstract US A

During the compilation or assembly of the source code program to produce the number of object code instructions, an optimum path of execution for the object code instruction is determined among all available functional units in the target computer in which the object code instruction could execute. Various sequences of execution of a number of object code instructions are simulated within a basic block of object code instructions that could be executed next for all combinations of available functional units in the target computer. An sequence of execution of the number of object code instructions is selected as an optimum order of execution which results in the fastest execution speed during the simulation step.

For each object code instruction in the number of object code instructions, an optimum path of execution is assigned among all available

functional units in the target computer in which the object code instruction could execute based on the optimum order of execution. If the optimum path of execution for the object code instruction is different than a preselected default path of execution for an object code instruction for a similar type of object code operation, a path instruction is inserted prior to the execution of the object code instruction directing that the next object code instruction be executed in the target computer according to the optimum path of execution for the object code instruction.

USE/ADVANTAGE - For inserting path instruction during compilation of computer programs for processor having multiple functional resources. Reduces overall execution time of basic block of instructions.

Title Terms/Index Terms/Additional Words: INSTRUCTION; SCHEDULE; OPTIMUM; PROCESSOR; REARRANGE; MACHINE; ORDER; RESULT; FAST; EXECUTE; BASED; RESOURCE; INTERACT; SIMULATE

Class Codes

International Classification (Main): G06F-015/00, G06F-009/45
(Additional/Secondary): G06F-009/30, G06F-009/38, G06F-009/455
US Classification, Issued: 395500000, 395375000, 395700000, 395800000, 395500000, 395700000, 364221200, 364280500, 364916300, 364973000

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-F03; T01-F05

Original Publication Data by Authority

Claims:

...multiple functional units capable of performing similar types of object code operations, a method of **determining** in which of a **plurality of the functional units that an object code instruction should execute**. the **method** comprising the computer-implemented steps of: during the compilation or assembly of the **source** code program to produce the plurality of object code instructions, determining an optimum path of...

...code instruction among all available functional units in the target computer in which the object **code instruction** could execute **by performing** the steps of simulating various **sequences of execution of a plurality of object code instructions within a basic block of object code instructions** that could be executed next for all combinations of available functional units in the target...

...object code instructions, assigning an optimum path of execution among all available functional units in **the target computer** in which the object code instruction could execute based on the optimum order of execution; and...

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24/69,K/7 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0010322413 - Drawing available
WPI ACC NO: 2000-636931/200061
XRPX Acc No: N2000-472229

Dynamic debugging information generation for computer-aided software engineering, by compiling source code of component, to generate new symbolic debugging data, when symbolic debugging information is invalid

Patent Assignee: OBJECT TECHNOLOGY LICENSING CORP (OBJE-N)

Inventor: MCINERNEY P J; WIMBLE M D; YOU L L

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
US 6067641	A	20000523	US 1995557767	A	19951113	200061 B
			US 1999246789	A	19990209	

Priority Applications (no., kind, date): ~~US 1995557767~~ A 19951113 US 1999246789 A 19990209

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
US 6067641	A	EN	63	42	Continuation of application US 1995557767

Continuation of patent US 5956479

Alerting Abstract US A

NOVELTY - The program counter value is used to locate a component in the memory, when program execution halts during debugging. The located component object code is related with its corresponding source code, to ascertain the validity of debugging information. When debugging information is not valid, the source code of the located component is compiled to generate new symbolic debugging information.

DESCRIPTION - The name components in the memory are stored and retrieved from a **database**. A compiler compiles the source code of each component to obtain object code. The compilation of components is sequenced responding to the component properties and dependencies.

USE - For demand-based generation of symbolic debugger information for computer-aided software engineering.

ADVANTAGE - Since information required for debug operation is built rather than the entire program, incremented debugging capability is improved.

DESCRIPTION OF DRAWINGS - The figure showing the block diagram of computer system.

Title Terms/Index Terms/Additional Words: DYNAMIC; DEBUG; INFORMATION; GENERATE; COMPUTER; AID; SOFTWARE; ENGINEERING; COMPILE; SOURCE; CODE; COMPONENT; NEW; SYMBOL; DATA; INVALID

Class Codes

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0011/36 A I R 20060101

G06F-0011/36 C I R 20060101

US Classification, Issued: 714038000, 712227000

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-F05A; T01-J20C

Alerting Abstract DESCRIPTION - The name components in the memory are stored and retrieved from a **database** . A compiler compiles the source code of each component to obtain object code. The compilation...

Original Publication Data by Authority

Original Abstracts:

...a function. One major functionality built in HOOPS is the debugger, using symbolic properties. The **database** stores the components and properties. The debugger, using a GUI, displays to the user the...

...code and retrieves source code configuration as needed. Symbolic properties that are stored in the **database** can be removed to reduce **database** and disk memory usage; they can be later reconstructed using the same method of demand...

Claims:

...each component including an attribute representing the validity of the component data, source code for **implementing** properties of the component and **object code for executing** the component, the **method** comprising the steps of: (a) providing class libraries for retention in the memory from which may be instantiated (1) a **database** functionally for persistently storing and **retrieving** the named components in the memory, (2) a compiler functionality for calculating dependencies associated with ...

...and dependencies: (b) providing a run-time environment to (1) support the instantiation of the **database** , compiler and build functionalities; and (2) support the execution of the debugger and **the** program such that (i) when program execution halts during debugging, using the program counter value...

...memory, (ii) checking the attribute of the located component to ascertain the validity of symbolic **debugging** information relating **the** located component **object** code to the located component source code, (iii) generating new symbolic debugging information by compiling...

24/69,K/8 (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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0007306471 - Drawing available
WPI ACC NO: 1995-368079/199548
Related WPI Acc No: 1995-368080
XRPX Acc No: N1995-272421

**Software program object distribution between producer and potential user -
loading software object which is encrypted onto computer-accessible memory
media along with file management program**

Patent Assignee: IBM CORP (IBMC); INT BUSINESS MACHINES CORP (IBMC)
Inventor: COOPER T E; PHILIPS H W; PRYOR R F

Patent Family (12 patents, 9 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
EP 679979	A1	19951102	EP 1995105442	A	19950411	199548 B
AU 199514856	A	19951102	AU 199514856	A	19950315	199551 E
JP 7295803	A	19951110	JP 199590472	A	19950417	199603 E
BR 199501522	A	19951121	BR 19951522	A	19950410	199604 E
CA 2145925	A	19951026	CA 2145925	A	19950330	199610 E
CN 1115059	A	19960117	CN 1995104201	A	19950414	199740 E
US 5689560	A	19971118	US 1994235035	A	19940425	199801 E
CA 2145925	C	19981208	CA 2145925	A	19950330	199908 E
KR 200444	B1	19990615	KR 19959726	A	19950425	200060 E
EP 679979	B1	20030618	EP 1995105442	A	19950411	200341 E
DE 69531077	E	20030724	DE 69531077	A	19950411	200356 E
			EP 1995105442	A	19950411	
CN 1132110	C	20031224	CN 1995104201	A	19950414	200564 E

Priority Applications (no., kind, date): US 1994235035 A 19940425; US
1994235032 A 19940425; EP 1995105442 A 19950411

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing Notes
EP 679979	A1	EN	49	35	

Regional Designated States, Original: DE FR GB

JP 7295803	A	JA	1
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BR 199501522	A	PT
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CA 2145925	A	EN
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US 5689560	A	EN	44	35
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CA 2145925	C	EN
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EP 679979	B1	EN
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Regional Designated States, Original: DE FR GB

DE 69531077	E	DE	Application EP 1995105442
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Based on OPI patent EP 679979

Alerting Abstract EP A1

A software object, a computer-accessible memory media and a file management program are provided. The software object is reversibly functionally limited by encryption. The object is recorded onto the media which is shipped from the producer to the potential user.

The file management program is loaded into a user-controlled data processing system.

It associates with an operating system for the system. The program is executed with the system to restrict access to the software object.

ADVANTAGE - Enables software trial with try-and-buy user interaction.

Title Terms/Index Terms/Additional Words: SOFTWARE; PROGRAM; OBJECT;
DISTRIBUTE; PRODUCE; POTENTIAL; USER; LOAD; ENCRYPTION; COMPUTER; ACCESS;
MEMORY; MEDIUM; FILE; MANAGEMENT

Class Codes

International Classification (Main): G06F-017/60

International Classification (+ Attributes)

IPC + Level Value Position Status Version

G06F-0001/00	A	I		R	20060101
G06F-0012/14	A	I	F	R	20060101
G06F-0021/00	A	I		R	20060101
G06F-0021/22	A	I	L	R	20060101
G06F-0021/24	A	I	L	R	20060101
G09C-0001/00	A	I	L	R	20060101
G06F-0001/00	C	I		R	20060101
G06F-0012/14	C	I	F	R	20060101
G06F-0021/00	C	I		R	20060101
G06F-0021/22	C	I	L	R	20060101
G09C-0001/00	C	I	L	R	20060101

US Classification, Issued: 380004000, 380009000, 380023000, 380025000,
380049000, 380050000, 340825310, 340825340, 395726000

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-H07C; T01-J12B; T01-J12C; T01-J20B

Original Publication Data by Authority

Original Abstracts:

...The computer-accessible memory media is read with the user-controlled data processing system. The **file** management program is utilized to restrict access to the software object...

...producer to the potential user. The file management program is loaded into a user-controlled **data** processing system, and associated with the operating system for the user-controlled data processing system...

Claims:

... A **method** of distributing software **objects** from a producer to a potential user, comprising the method steps of:providing a software...

...reading said computer-accessible memory media with said user-controlled data processing system;utilizing said **file** management **program** to **restore** said **function** of said software **object** with said user-controlled data processing system to allow access to said software object following

Set	Items	Description
S1	281670	DATABASE? OR DATABANK? OR DATA() (BASE? OR BANK? OR FILE? OR REPOSITOR? OR WAREHOUSE?) OR DB OR RDB OR OODB OR ODBC OR DB-MS OR RDBMS
S2	524	S1(7N)((RECURS? OR REPEAT? OR PROGRESSIV? OR REITERAT? OR ITERAT? OR REPRIS? OR (RUN OR DO OR EXECUT?)()AGAIN OR REDO??? OR RE() (DO OR DOING OR RUN? ? OR RUNNING OR EXECUT?)) (5N)(INQUIR? OR ENQUER???? OR QUERY??? OR QUERIE? ? OR REQUEST? OR ASK??? OR QUESTION? OR SEARCH?))
S3	9777	(COMPLET? OR FINISH??? OR END??? OR ENTIR? OR FULLY OR TOTAL? OR RESULT?) (5N)(SUBROUTIN? OR EMULAT? OR SUBPROGRAM? OR COMPUTER?(2N)(CODE? OR UTILIT? OR SCRIPT? OR PROGRAM? OR ROUTINE? OR SUBROUTIN? OR INFORMATION? OR DATA))
S4	1190	S3(5N)(CREAT? OR PRODUC? OR DEVELOP? OR ORIGINAT? OR MAKE? OR MAKING? OR MADE OR GENERAT?)
S5	9718	(LOGIC? OR DIRECTION? OR FUNCTION? ? OR RULE?? OR METHOD?? OR PROCEDUR? OR FORMULA? OR STRATEG? OR INSTRUCTION?? OR EXPRESSION???) (3N)(CODE? OR UTILIT? OR SCRIPT? OR PROGRAM? OR ROUTINE? OR SUBROUTIN?) (3N)(CLASS?? OR OBJECT? OR ENTIT?)
S6	925	S5(5N)(MULTI OR PLURAL? OR MORE(2N)ONE OR SEVERAL OR MANY - OR VARIOUS OR VARIET?)
S7	54	S6(7N)(MONITOR? OR EXAMIN? OR DETECT? OR UNCOVER? OR REVEAL? OR ASSESS? OR EVALUAT? OR INSPECT?)
S8	96	S6(7N)(DETERMIN? OR COMPAR? OR DISCERN? OR ASCERTAIN? OR ANALY? OR IDENT? OR CHECK? OR VERIF? OR JUDG???)
S9	0	S2(100N)S4(100N)S5
S10	0	S2(100N)S3(100N)S5
S11	865	(REPAIR? OR FIX OR FIXE? ? OR FIXING OR PATCH? OR RESTOR? - OR CORRECT? OR DEBUG? OR DE() (BUG? ? OR BUGG???) OR REBUIL?) (-3N)(STORE? ? OR STORAG? OR STORING OR MEMOR?) (3N)(CLASS? OR OBJECT? OR ENTIT?)
S12	0	S2(100N)S11
S13	131	S1:S2(100N)S11
S14	1	S13(100N)RECURS?
S15	2	S13(100N)S3:S4(100N)S5:S8
S16	2	S15 NOT S14
S17	3	S11(100N)S3:S4(100N)S5:S8
S18	3	S16:S17
S19	12	S13(100N)(DEBUG???)
S20	11	S19 NOT S14:S18

File 348:EUROPEAN PATENTS 1978-2007/ 200750

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File 349:PCT FULLTEXT 1979-2007/UB=20071129UT=20071122

(c) 2007 WIPO/Thomson

14/5,K/1 (Item 1 from file: 349)
DIALOG(R) File 349:PCT FULLTEXT
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00577727 **Image available**

SYSTEM AND METHOD FOR RECURSIVE PATH ANALYSIS OF DBMS PROCEDURES
SYSTEME ET PROCEDE D'ANALYSE RECURSIVE DE PROCEDURES DE SYSTEMES DE GESTION
DE BASE DE DONNEES (SGBD)

Patent Applicant/Assignee:

COMPUTER ASSOCIATES THINK INC,

Inventor(s):

VINCENT John K,

CHERNY Igor,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200041100 A1 20000713 (WO 0041100)

Application: WO 2000US276 20000106 (PCT/WO US0000276)

Priority Application: US 99226939 19990108

Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK EE ES FI GB GD
GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG
MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN
YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT
BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA
GN GW ML MR NE SN TD TG

Main International Patent Class (v7): G06F-017/30

Publication Language: English

Fulltext Availability:

Detailed Description

Claims

Fulltext Word Count: 7796

English Abstract

A system, method and **database** development tools are disclosed for automatically generating the complete dependency graph (12) for use in **debugging** stored code **objects** (11) in a **database**, by using a **recursive** dependency tracking algorithm (14) which takes into consideration the indirect dependencies (15) on triggers as well as the dependencies on implementations of object oriented code objects which are represented as separate objects in the **database** catalog.

French Abstract

La presente invention concerne un systeme, un procede et un instrument de mise au point de bases de donnees, visant a generer automatiquement le graphe complet (12) des dependances afin d'effectuer la mise au point d'objets (11) a code memorises dans une base de donnees. Ledit systeme utilise un algorithme (14) recursif de recherche de dependances, tenant compte des dependances indirectes (15) des declenchements ainsi que des dependances de la mise en oeuvre d'objets a code orientes-objet, qui sont representes comme des objets separees dans le catalogue de la base de donnees.

Fulltext Availability:

Detailed Description

English Abstract

A system, method and **database** development tools are disclosed for automatically generating the complete dependency graph (12) for use in **debugging** stored code **objects** (11) in a **database**, by using a

recursive dependency tracking algorithm (14) which takes into consideration the indirect dependencies (15) on triggers as...

...on implementations of object oriented code objects which are represented as separate objects in the **database** catalog.

Detailed Description

... The solution to this technical problem developed by applicants uses a query that is called **recursively** . An array is used to track the parents so that the graph can be reconstructed...

...it is determined whether the dependency already occurs in the graph. If it occurs, the **recursion** is stopped.

DISCLOSURE OF THE INVENTION

A system, method and **database** development tool are disclosed for automatically generating the complete dependencies of a stored code object in a **database** by applying a set of **recursive** procedures and parsing the source code of the code objects.

Also a method for generating...

...and their relationship with one another is claimed.

Additionally claimed are a method for generating **debug** versions of **stored** code **objects** and all its dependencies. Also claimed is a method for identifying potential run-time errors...

...dependent code objects. Also claimed is a method for identifying the cyclic dependencies of a **database** code object. Also claimed is a method of debugging code objects in a **database** using the complete dependency graph of the particular code object. Also claimed is a method of developing **database** programs comprising a computer system and a program code mechanism for automatically generating complete dependencies...

?

Set	Items	Description
S1	1230434	DATABASE? OR DATABANK? OR DATA() (BASE? OR BANK? OR FILE? OR REPOSITOR? OR WAREHOUSE?) OR DB OR RDB OR OODB OR ODBC OR DB-MS OR RDBMS
S2	1217	S1(7N)((RECURS? OR REPEAT? OR PROGRESSIV? OR REITERAT? OR - ITERAT? OR REPRIS? OR (RUN OR DO OR EXECUT?)()AGAIN OR REDO??? OR RE() (DO OR DOING OR RUN? ? OR RUNNING OR EXECUT?))(5N)(IN-QUIR? OR ENQUER???? OR QUERY??? OR QUERIE? ? OR REQUEST? OR A-SK??? OR QUESTION? OR SEARCH?))
S3	28865	(COMPLET? OR FINISH??? OR END??? OR ENTIR? OR FULLY OR TOT-AL? OR RESULT?) (5N) (SUBROUTIN? OR EMULAT? OR SUBPROGRAM? OR C-OMPUTER?(2N) (CODE? OR UTILIT? OR SCRIPT? OR PROGRAM? OR ROUTI-NE? OR SUBROUTIN? OR INFORMATION? OR DATA))
S4	3455	S3(5N) (CREAT? OR PRODUC? OR DEVELOP? OR ORIGINAT? OR MAKE? OR MAKING? OR MADE OR GENERAT?)
S5	28021	(LOGIC? OR DIRECTION? OR FUNCTION? ? OR RULE?? OR METHOD?? OR PROCEDUR? OR FORMULA? OR STRATEG? OR INSTRUCTION?? OR EXPR-ESSION???) (3N) (CODE? OR UTILIT? OR SCRIPT? OR PROGRAM? OR ROU-TINE? OR SUBROUTIN?) (3N) (CLASS?? OR OBJECT? OR ENTIT?)
S6	2788	S5(5N) (MULTI OR PLURAL? OR MORE(2N) ONE OR SEVERAL OR MANY - OR VARIOUS OR VARIET?)
S7	80	S6(7N) (MONITOR? OR EXAMIN? OR DETECT? OR UNCOVER? OR REVEA-L? OR ASSESS? OR EVALUAT? OR INSPECT?)
S8	177	S6(7N) (DETERMIN? OR COMPAR? OR DISCERN? OR ASCERTAIN? OR A-NALY? OR IDENT? OR CHECK? OR VERIF? OR JUDG???)
S9	0	S2 AND S4
S10	1	S2 AND S3
S11	93	S2 AND S5:S8
S12	0	S11 AND S7:S8
S13	0	S11 AND S3
S14	93	S11 AND RECURS?
S15	92	S14 AND PY=1978:1999
S16	253	(REPAIR? OR FIX OR FIXE? ? OR FIXING OR PATCH? OR RESTOR? - OR CORRECT? OR DEBUG? OR DE() (BUG? ? OR BUGG???) OR REBUIL?) (-3N) (STORE? ? OR STORAG? OR STORING OR MEMOR?) (3N) (CLASS? OR O-BJECT? OR ENTIT?)
S17	0	S15 AND S16
S18	0	S16 AND S2
S19	2	S15 AND DEBUG?
S20	0	S16 AND S4
S21	90	S15 NOT S19
S22	0	S21 AND S4
S23	90	S21 AND S5:S8
S24	90	S23 AND RECURS?(5N)QUER????
S25	88	RD (unique items)
S26	0	S25 AND S3
S27	6	S25 AND (SUBROUTIN? OR EMULAT? OR SUBPROGRAM? OR COMPUTER?- (2N) (CODE? OR UTILIT? OR SCRIPT? OR PROGRAM? OR ROUTINE? OR S-UBROUTIN? OR INFORMATION? OR DATA))
S28	24	S16 AND S1
S29	0	S28 AND S5:S8
S30	3	S28 AND (SUBROUTIN? OR EMULAT? OR SUBPROGRAM? OR COMPUTER?- (2N) (CODE? OR UTILIT? OR SCRIPT? OR PROGRAM? OR ROUTINE? OR S-UBROUTIN? OR INFORMATION? OR DATA))
S31	3	S30 NOT S27
S32	21	S28 NOT (S10 OR S19 OR S27 OR S30)
S33	13	RD (unique items)
File	2:INSPEC 1898-2007/Nov W4	
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File	6:NTIS 1964-2007/Dec W4	
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Abstract Npl.
files

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File 35: Dissertation Abs Online 1861-2007/Aug
(c) 2007 ProQuest Info&Learning

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(c) 2007 CSA.

File 60: ANTE: Abstracts in New Tech & Engineer 1966-2007/Nov
(c) 2007 CSA.

File 62: SPIN(R) 1975-2007/Nov W4
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File 111: TGG Natl. Newspaper Index(SM) 1979-2007/Nov 30
(c) 2007 The Gale Group

File 144: Pascal 1973-2007/Dec W1.
(c) 2007 INIST/CNRS

File 239: Mathsci 1940-2007/Dec
(c) 2007 American Mathematical Society

File 256: TecInfoSource 82-2007/Apr
(c) 2007 Info.Sources Inc

File 434: SciSearch(R) Cited Ref Sci 1974-1989/Dec
(c) 2006 The Thomson Corp

File 583: Gale Group Globalbase(TM) 1986-2002/Dec 13
(c) 2002 The Gale Group

27/7/1 (Item 1 from file: 8)
DIALOG(R) File 8: Ei Compendex(R)
(c) 2007 Elsevier Eng. Info. Inc. All rts. reserv.

07623932 E.I. No: EIP97023518495

Title: Recursive query processing using graph traversal techniques
Author: Pulido, Estrella
Corporate Source: Univ of Bristol, Bristol, UK
Conference Title: Proceedings of the 1996 5th ACM CIKM International
Conference on Information and Knowledge Management
Conference Location: Rockville, MD, USA Conference Date:
19961112-19961116
Sponsor: ACM; SIGIR; SIGART
E.I. Conference No.: 45973
Source: International Conference on Information and Knowledge Management,
Proceedings 1996.. p 37-44
~~Publication Year: 1996~~
CODEN: 002176
Language: English
Document Type: CA; (Conference Article) Treatment: G; (General Review);
T; (Theoretical)
Journal Announcement: 9704W1

Abstract: This paper presents STARBASE, a new algorithm for recursive query processing on deductive databases based on the Chart Parsing algorithm. It is distinct from the other applications of parsing to deduction, namely Earley Deduction and Rosenblueth's method, because it removes variables from literals and extends the Chart Parsing engine to handle all possible variations in the pattern of arguments in the literals of deduction rules. Like other tabling methods, STARBASE avoids redundant computation by storing and reusing partial results but, in contrast with them, it does not depend on subsumption and uses syntactic equality checking, instead. Because STARBASE takes a strongly graph-oriented view of both the database and the deduction rules, the evaluation of a query on a database can be viewed as a process of traversing paths in the graph representing the database. A prototype of the STARBASE system has been implemented in the C language. Performance results show that STARBASE, even in prototype form, lies within the performance range of the most advanced existing systems. (Author abstract) 13 Refs.

27/7/2 (Item 2 from file: 8)
DIALOG(R) File 8: Ei Compendex(R)
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05804105 E.I. Monthly No: EIM8910-033325

Title: Proceedings of the Eighth ACM SIGACT-SIGMOD-SIGART Symposium on Principles of Database Systems.

Author: Anon.

Conference Title: Proceedings of the Eight ACM SIGACT-SIGMOD-SIGART Symposium on Principles of Database Systems

Conference Location: Philadelphia, PA, USA Conference Date: 19890329

Sponsor: Special Interest Group for Automata and Computability Theory; Special Interest Group for the Management of Data; Special Interest Group for Artificial Intelligence

E.I. Conference No.: 12323

Source: Proc Eighth ACM SIGACT-SIGMOD-SIGART Symp Princ Database Syst 1989. Publ by ACM, New York, NY, USA. 401p

Publication Year: 1989

ISBN: 0-89791-308-6

Language: English

Document Type: CP; (Conference Proceedings) Treatment: A; (Applications); T; (Theoretical)

Journal Announcement: 8910

Abstract: This conference proceedings contains 38 papers. The main subjects are logic programs and programming, application of logic programming to databases, query processing complexity, query evaluation algorithms, Horn Tables, handling of incomplete information in database, automata theory, database updating, testing of normal forms, recursive query processing, modular architectures for distributed and database systems, clustered multiattribute hash files, B-trees, secondary key retrieval, declustering using error correcting codes, concurrency control, query languages, object-oriented databases, and logic for object-oriented logic programming.

27/7/3 (Item 1 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2007 The Thomson Corp. All rts. reserv.

03459376 Genuine Article#: NE818 Number of References: 12
Title: **ADVANCED INTELLIGENT NETWORK SERVICE LABORATORY**
Author(s): BOSCO PG; FARACI F
Corporate Source: CSELT SPA,VIA REISS ROMOLI 274/I-10148 TURIN//ITALY/
Journal: CANADIAN JOURNAL OF ELECTRICAL AND COMPUTER ENGINEERING-REVUE
CANADIENNE DE GENIE ELECTRIQUE ET INFORMATIQUE, ~~1994~~, V19, N1 (JAN)
, P21-25
ISSN: 0840-8688
Language: ENGLISH Document Type: ARTICLE

Abstract: This paper presents the architecture of a laboratory for design, validation and execution of advanced intelligent network (AIN) services. The AIN service laboratory permits testing of new services from design to execution. It is composed of two main parts: a design environment, where design and logical validation take place, and a hardware/software system closely **emulating** a real AIN structure (with service switching points, service control points, etc.), where the service can be directly tested. A technical overview of the AIN service laboratory is provided, describing the following issues: a formal and practical approach to validation, ranging from traditional human inspection to automatic verification of global temporal properties; a logic-programming-based concurrency model and nondeterministic backtrackable simulator on which SDL processes, representing IN functional entities and agents, are mapped; animation of network scenarios; a service logic execution environment designed on the basis of IN functional architecture defined in CCITT draft recommendation Q1214; a standard basic call state model (BCSM)-based call control, implemented in a service switching point (SSP) **emulator**. Furthermore, a description of an advanced universal personal telecommunication (UPT) service for which new network capabilities such as speech recognition are integrated and tested in the AIN service laboratory, is provided as an example.

27/7/4 (Item 2 from file: 34)
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci
(c) 2007 The Thomson Corp. All rts. reserv.

02902926 Genuine Article#: MP441 Number of References: 18
Title: SCHEDULING SPECULATIVE WORK IN MUSE AND PERFORMANCE RESULTS
Author(s): ALI KAM; KARLSSON R
Corporate Source: SICS/S-16428 KISTA//SWEDEN/
Journal: INTERNATIONAL JOURNAL OF PARALLEL PROGRAMMING, 1992 , V21, N6 (DEC), P449-476
ISSN: 0885-7458
Language: ENGLISH Document Type: ARTICLE

Abstract: Work which may later be pruned is called speculative work. In this paper we present and evaluate a simple and efficient strategy, used in the Muse OR-parallel Prolog system, for better scheduling of speculative work. The strategy concentrates workers on the leftmost available work in the Prolog tree as long as there exists enough parallelism, thus **emulating** the sequential Prolog execution as much as possible. This strategy therefore makes it less probable that unnecessary work is executed. A new cut scheme that reduces the amount of speculative work is also presented. The performance results of our strategy are compared with the performance results of similar strategies implemented in the Aurora OR-parallel Prolog system. The comparison shows that our strategy performs quite well.

27/7/5 (Item 1 from file: 56)

DIALOG(R)File 56:Computer and Information Systems Abstracts
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0000216091 IP ACCESSION NO: 0031265

Network-based simple recursive answer evaluation for deductive databases
in parallel environment.

Kim, Keecheon; Henschen, L J
Northwestern Univ, Evanston, IL, USA

ADDL. SOURCE INFO: PROC 4 INT CONF SOFTWARE ENG KNOWLEDGE ENG., IEEE,
COMPUTER SOCIETY, LOS ALAMITOS, CA (USA), 1992, pp. 63-70,

PUBLICATION DATE: 1992

PUBLISHER: IEEE, COMPUTER SOCIETY, LOS ALAMITOS, CA (USA)

CONFERENCE:

the 4th International Conference on Software Engineering and Knowledge
Engineering, Capri, Italy, 06/15-20/92

RECORD TYPE: Abstract

LANGUAGE: English

ISBN: 0-8186-2830-8

FILE SEGMENT: Computer & Information Systems Abstracts

ABSTRACT:

Because of increasing needs and requirements for the use of databases, we always look for more efficient ways to handle database access. Parallel computing environments draw more attention to achieve the high processing speed and the less expensive processing method. In this paper, we propose the possibility of using a connectionist model by treating every datum as an active processing unit cooperating with other such units via messages in getting answers in a deductive database, especially with recursion. We use query compilation and iteration to process the recursive case. The notion of the reverse-compilation which is essential to get the correct answers is introduced in handling recursive cases. We introduce the recursive controller which is dedicated to processing the recursive cases as a sublayer to a central database controller.

27/7/6 (Item 1 from file: 144)
DIALOG(R) File 144:Pascal
(c) 2007 INIST/CNRS. All rts. reserv.

13790243 PASCAL No.: 98-0504567
Querying sequence databases with transducers
DBPL-6 : database programming languages : Estes Park CO, 18-20 August
1997
BONNER A J; MECCA G
CLUET Sophie, ed; HULL Rick, ed
University of Toronto - Department of Computer Science, Toronto, ON,
Canada; D.I.F.A. - Universita della Basilicata - via della Tecnica, 3,
85100 Potenza, Italy
Database programming languages. International workshop, 6 (Estes Park CO
USA) 1997-08-18
Journal: Lecture notes in computer science, 1998, 1369 118-135
ISBN: 3-540-64823-2 ISSN: 0302-9743 Availability: INIST-16343;
354000076409400080
No. of Refs.: 29 ref.
Document Type: P (Serial); C (Conference Proceedings) ; A (Analytic)
Country of Publication: Germany; United States
Language: English

This paper develops a database query language called Transducer Datalog motivated by the needs of a new and emerging class of database applications. In these applications, such as text databases and genome databases, the storage and manipulation of long character sequences is a crucial feature. The issues involved in managing this kind of data are not addressed by traditional database systems, either in theory or in practice. To address these issues, in recent work, we introduced a new machine model called a generalized sequence transducer. These generalized transducers extend ordinary transducers by allowing them to invoke other transducers as "subroutines." This paper establishes the computational properties of Transducer Datalog, a query language based on this new machine model. In the process, we develop a hierarchy of time-complexity classes based on the Ackermann function. The lower levels of this hierarchy correspond to well-known complexity classes, such as polynomial time and hyper-exponential time. We establish a tight relationship between levels in this hierarchy and the depth of subroutine calls within Transducer Datalog programs. Finally, we show that Transducer Datalog programs of arbitrary depth express exactly the sequence functions computable in primitive-recursive time.

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33/7/3 (Item 3 from file: 2)

DIALOG(R) File 2:INSPEC

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07164276 INSPEC Abstract Number: C1999-03-6160D-019

Title: A pattern of inheritance and polymorphism for persistent objects stored in a relational database

Author(s): Chung-Yeung Pang

Author Affiliation: Seveco AG, Buttwil, Switzerland

Journal: JOOP vol.11, no.9 p.41-4

Publisher: SIGS Publications

Publication Date: Feb. 1999 Country of Publication: USA

CODEN: JOOPEC ISSN: 0896-8438

SICI: 0896-8438(199902)11:9L:41:PIPP;1-Y

Material Identity Number: G316-1999-002

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: Because relational **databases** (RDBs) do not support object-oriented features like inheritance and polymorphism, persistent objects whose data are stored in an **RDB** cannot usually make full use of these features. A solution to this problem is presented in this article in the form of a design and C++ implementation pattern. In this pattern, the mapping of the persistent objects to **RDB** tables is addressed. A surrogate concept is used for the design of the persistent objects. The use of surrogates allows persistent objects to be extended through inheritance. Polymorphism is supported even though the structure of the persistent **objects** is **fixed** according to their **storage** in the **RDB** tables. (2 Refs)

Subfile: C

Copyright 1999, IEE

33/7/4 (Item 4 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2007 Institution of Electrical Engineers. All rts. reserv.

07161818 INSPEC Abstract Number: C1999-03-6160D-018

Title: A framework for knowledge discovery from large relational databases

Author(s): Ajaja, M.K.; Abdel-Wahhab, A.H.; Shaheen, S.I.

Conference Title: Proceedings of the Fourth IEEE International Conference on Electronics, Circuits and Systems Part vol.2 p.635-9 vol.2

Publisher: Electron. Res. Inst, Cairo, Egypt

Publication Date: 1997 Country of Publication: Egypt 3 vol. xxxvii+1523 pp.

Material Identity Number: XX-1998-02933

Conference Title: Proceedings of 4th International Conference on Electronics Circuits and Systems (ICECS'97)

Conference Sponsor: Minstr. Int. Cooperation; IEEE CAS Soc.; IEEE Chapter

Conference Date: 15-18 Dec. 1997 Conference Location: Cairo, Egypt

Language: English Document Type: Conference Paper (PA)

Treatment: Practical (P)

Abstract: Many researchers have proposed methods and operators for discovering different kinds of patterns from **databases**, like for example association rules, characteristic rules, and decision trees. Most of them assume that data is stored in a flat relational table, where each of the tuples corresponds to one **object** and has several properties **stored** in a **fixed** number of attributes. This format is not suitable for many real world applications and general discovery techniques. In this paper, a new framework is proposed that can extract patterns from data stored in normalized tables in relational **databases**. This framework uses mutual implication rules with forward and backward certainty measures and maps the patterns as a set of mutual implication rules. The discovery task is directed by a meta-knowledge query that directs the search for the required patterns. (16 Refs)

Subfile: C

Copyright 1999, IEE

33/7/6 (Item 6 from file: 2)

DIALOG(R) File 2:INSPEC

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05401942 INSPEC Abstract Number: C9306-6160J-006

Title: **Supporting physical independence in object databases**

Author(s): Aloia, N.; Barneva, S.; Rabitti, F.

Author Affiliation: CNUCE-CNR, Pisa, Italy

Journal: Database Technology vol.4, no.4 p.265-86

~~Publication~~ Date: 1991-1992* Country of Publication: UK

CODEN: DATEEA ISSN: 0951-9327

U.S. Copyright Clearance Center Code: 0951-9327/92/\$5.00+0.00

Language: English Document Type: Journal Paper (JP)

Treatment: Practical (P)

Abstract: In the current implementations of object **database** systems, the physical **database** organization is usually hard-coded in the system, i.e. the strategy for **memorizing** the data **objects** is **fixed** and cannot be changed by the user. The physical object organization usually reflects only the logical object definitions (i.e. the class definition). The authors provide the **database** designer with capabilities which permit him to choose the most suitable physical organization for an object **database**, in order to meet the performance requirements of particular applications. For this purpose, they have defined a canonical object data model and a storage object data model. In the first, the objects are organized in classes and basic operations on classes and objects are provided. In the second (which is similar to the data media control language of traditional **database** systems), physical objects with similar structures are grouped in collections. Operations for grouping and partitioning logical objects into physical objects are provided. As a result, a collection may correspond to one or more classes (or parts of them) of the canonical **database** schema. The languages used to describe the canonical object data model and the storage object data model are presented and the mechanisms for mapping data structures and operations from one level to the other are discussed. (14 Refs)

Subfile: C